

Sequence Listing

<110> Brunetta, Paul G. Sliwkowski, Mark X.

<120> THERAPY OF NON-MALIGNANT DISEASES OR DISORDERS WITH ANTI-ERBB2 ANTIBODIES

<130> P1979R1

<140> US 10/719,310

<141> 2003-11-21

<150> US 60/428,027

<151> 2002-11-21

<160> 22

<210> 1

<211> 107

<212> PRT

<213> Mus Musculus

<400> 1

Asp Thr Val Met Thr Gln Ser His Lys Ile Met Ser Thr Ser Val

1 5 10 15

Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Ser 20 25 30

Ile Gly Val Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Lys
35 40 45

Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp
50 55 60

Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile 65 70 75

Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln 80 85 90

Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu 95 100 105

Ile Lys

<210> 2

<211> 119

<212> PRT

<213> Mus musculus

<400> 2

Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Thr Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Asp Tyr Thr Met Asp Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr Asn Gln Arg Phe Lys Gly Lys Ala Ser Leu Thr Val Asp Arg Ser Ser Arg Ile Val Tyr Met Glu Leu Arg Ser Leu Thr Phe Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser 110 <210> 3 <211> 107 <212> PRT <213> Artificial Sequence <223> sequence is synthesized <400> 3 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Ser Ile Gly Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu

Ile Lys

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<210> 4
<211> 119
<212> PRT
<213> Artificial Sequence
<223> sequence is synthesized
<220>
<221> artificial
<222> 1-119
<223> Fab 574 VH
<400> 4
Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr
 Asp Tyr Thr Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 Glu Trp Val Ala Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr
                  50
 Asn Gln Arg Phe Lys Gly Arg Phe Thr Leu Ser Val Asp Arg Ser
 Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
                                      85
 Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr
                                     100
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                 110
                                     115
<210> 5
<211> 107
<212> PRT
<213> Artificial Sequence
<220>
<223> sequence is synthesized
<400> 5
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
                   5
Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
 Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
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Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser 50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln 80 85 90

Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu 95 100 105

Ile Lys

<210> 6

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> sequence is synthesized

<400> 6

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
1 5 10 15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser

Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 35 40 45

Glu Trp Val Ala Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
50 55 60

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
65 70 75

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp 80 85 90

Thr Ala Val Tyr Tyr Cys Ala Arg Gly Arg Val Gly Tyr Ser Leu 95 100 105

Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 110 115

<210> 7

<211> 10

<212> PRT

<213> Mus musculus

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<220>
<221> unsure
<222> 10
<223> unknown amino acid
 Gly Phe Thr Phe Thr Asp Tyr Thr Met Xaa
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<210> 8
<211> 17
<212> PRT
<213> Mus musculus
<400> 8
 Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr Asn Gln Arg Phe
Lys Gly
<210> 9
<211> 10
<212> PRT
<213> Mus musculus
<400> 9
Asn Leu Gly Pro Ser Phe Tyr Phe Asp Tyr
<210> 10
<211> 11
<212> PRT
<213> Mus musculus
<400> 10
 Lys Ala Ser Gln Asp Val Ser Ile Gly Val Ala
   1 . 5
<210> 11
<211> 7
<212> PRT
<213> Mus musculus
<220>
<221> unsure
<222> 5-7
<223> unknown amino acid
<400> 11
 Ser Ala Ser Tyr Xaa Xaa Xaa
   1
                   5
<210> 12
<211> 9
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<212> PRT <213> Mus musculus <400> 12 Gln Gln Tyr Tyr Ile Tyr Pro Tyr Thr <210> 13 <211> 645 <212> PRT <213> human <400> 13 Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn Gly 110 115 Asp Pro Leu Asn Asn Thr Thr Pro Val Thr Gly Ala Ser Pro Gly 125 Gly Leu Arg Glu Leu Gln Leu Arg Ser Leu Thr Glu Ile Leu Lys 140 145 Gly Gly Val Leu Ile Gln Arg Asn Pro Gln Leu Cys Tyr Gln Asp 155 Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser Ser Glu

200

Asp	Cys	Gln	Ser	Leu 215	Thr	Arg	Thr	Val	Cys 220	Ala	Gly	Gly	Cys	Ala 225		
Arg	Cys	Lys	Gly	Pro 230	Leu	Pro	Thr	Asp	Cys 235	Cys	His	Glu	Gln	Cys 240		
Ala	Ala	Gly	Cys	Thr 245	Gly	Pro	Lys	His	Ser 250	Asp	Cys	Leu	Ala	Cys 255		
Leu	His	Phe	Asn	His 260	Ser	Gly	Ile	Cys	Glu 265	Leu	His	Cys	Pro	Ala 270		
Leu	Val	Thr	Tyr	Asn 275	Thr	Asp	Thr	Phe	Glu 280	Ser	Met	Pro	Asn	Pro 285		
Glu	Gly	Arg	Tyr	Thr 290	Phe	Gly	Ala	Ser	Cys 295	Val	Thr	Ala	Cys	Pro 300		
Tyr	Asn	Tyr	Leu	Ser 305	Thr	Asp	Val	Gly	Ser 310	Cys	Thr	Leu	Val	Cys 315		
Pro	Leu	His	Asn	Gln 320	Glu	Val	Thr	Ala	Glu 325	Asp	Gly	Thr	Gln	Arg 330	-	
Cys	Glu	Lys	Cys	Ser 335	Lys	Pro	Cys	Ala	Arg 340	Val	Cys	Tyr	Gly	Leu 345		
Gly	Met	Glu	His	Leu 350	Arg	Glu	Val	Arg	Ala 355	Val	Thr	Ser	Ala	Asn 360		
Ile	Gln	Glu	Phe	Ala 365	Gly	Cys	Lys	Lys	Ile 370	Phe	Gly	Ser	Leu	Ala 375		
Phe	Leu	Pro	Glu	Ser 380	Phe	Asp	Gly	Asp	Pro 385	Ala	Ser	Asn	Thr	Ala 390		
Pro	Leu	Gln	Pro	Glu 395	Gln	Leu	Gln	Val	Phe 400	Glu	Thr	Leu	Glu	Glu 405		
Ile	Thr	Gly	Tyr	Leu 410	Tyr	Ile	Ser	Ala	Trp 415	Pro	Asp	Ser	Leu	Pro 420		
Asp	Leu	Ser	Val	Phe 425	Gln	Asn	Leu	Gln	Val 430	Ile	Arg	Gly	Arg	Ile 435		
Leu	His	Asn	Gly	Ala 440	Tyr	Ser	Leu	Thr	Leu 445	Gln	Gly	Leu	Gly	Ile 450		
Ser	Trp	Leu	Gly	Leu 455	Arg	Ser	Leu	Arg	Glu 460	Leu	Gly	Ser	Gly	Leu 465		
Ala	Leu	Ile	His	His 470	Asn	Thr	His	Leu	Cys 475	Phe	Val	His	Thr	Val 480		

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	Pro	Trp	Asp	Gln	Leu 485	Phe	Arg	Asn	Pro	His 490	Gln	Ala	Leu	Leu	His 495	,
	Thr	Ala	Asn	Arg	Pro 500	Glu	Asp	Glu	Cys	Val 505	Gly	Glu	Gly	Leu	Ala 510	
	Cys	His	Gln	Leu	Cys 515	Ala	Arg	Gly	His	Cys 520	Trp	Gly	Pro	Gly	Pro 525	
	Thr	Gln	Cys	Val	Asn 530	Cys	Ser	Gln	Phe	Leu 535	Arg	Gly	Gln	Glu	Cys 540	
	Val	Glu	Glu	Cys	Arg 545	Val	Leu	Gln	Gly	Leu 550	Pro	Arg	Glu	Tyr	Val 555	
	Asn	Ala	Arg	His	Cys 560	Leu	Pro	Cys	His	Pro 565	Glu	Cys	Gln	Pro	Gln 570	
•	Asn	Gly	Ser	Val	Thr 575	Cys	Phe	Gly	Pro	Glu 580	Ala	Asp	Gln	Cys	Val	
	Ala	Cys	Ala	His	Tyr 590	Lys	Asp	Pro	Pro	Phe 595	Cys	Val	Ala	Arg	Cys 600	
	Pro	Ser	Gly	Val	Lys 605	Pro	Asp	Leu	Ser	Tyr 610	Met	Pro	Ile	Trp	Lys 615	
•	Phe.	Pro	Asp	Glu	Glu 620	Gly	Ala	Cys	Gln	Pro 625	Cys	Pro	Ile	Asn	Cys 630	÷
	Thr	His	Ser	Cys	Val 635	Asp	Leu	Asp	Asp	Lys 640	Gly	Cys	Pro	Ala	Glu 645	٠